

Claim 44. (Previously presented) The method of claim 33, wherein said cloned test transcription factor polynucleotide is expressed transiently in the cell.

Claim 45. (Previously presented) The method of claim 33, wherein said cell is from a plant.

Claim 46. (Previously presented) The method of claim 33, wherein said promoter operably linked to a reporter gene is transiently transfected into a cell.

Claim 47. (Previously presented) The method of claim 46, wherein said reporter gene is beta-glucuronidase (GUS).

Claim 48. (Previously presented) The method of claim 33, wherein said promoter is the promoter of a biosynthetic pathway gene of a plant that produces secondary metabolites.

Claim 49. (Previously presented) The method of claim 41, wherein said terpenoid pathway gene is from a species selected from the group consisting of *Mentha* and *Taxus*.

Claim 50. (Previously presented) The method of claim 41, wherein said terpenoid pathway gene is selected from the group consisting of limonene synthase and taxadiene synthase.

REMARKS

Amendments to the claims have been made in response the Examiner's comments. No new matter enters the claims or specification by any of these amendments, and Applicants believe that these amendments do not raise new issues.

Applicants also note that the Applicants' prior response to the Office action of May 23, 2003 was mailed on ***June 11, 2003***. However, under the USPTO's own guidelines for treatment of amendments, ***Applicants had until July 30, 2003 to submit amendments compliant with the previous version of amendment practice*** under 37 C.F.R. 1.121 (see "Amendments Permitted under the Revised Amendment Practice", and "Revised Amendment Practice", page one of each reference with appropriate passages highlighted). In the interest of good will, Applicants are complying with the Examiner's wishes in the present Response. However, Applicants reserve the right to request a patent term extension for the delay brought about by this Office action.

The Pending Claims

Prior to the entry of these Amendments, Claims 1-18, 26 and 33-50 are pending. Claims 1-11, 13-18, 26, 33, and 35-50 remain in this application. Claims 19-25 and 27-32 had been previously withdrawn. Claim 12 had been previously canceled. Claims 2 and 34 are presently canceled.

The Office Action

Claims 18,33 and 35-50 are rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 1,2,4,10,11,13,14 and 26 are rejected under 35 U.S.C. §102(b) as being anticipated by Liu et al.

The Examiner acknowledges that Claims 3,5-9,15-17 and 34 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, but are currently objected to as being dependent upon a rejected base claim.

In view of the Examiner's earlier restriction requirement, Applicants retain the right to present claims 19-25 and 26-32 in a divisional application.

Amendments

Applicants have canceled Claims 2 and 34, and amended Claims 1, 3-5, 10-11, 13-15, 18, 26, 33, 38-39, and 40-42 as noted above.

Support

Support for each of the amendments to the claims is provided by the claims as filed.

In addition, the amendment to Claim 1 in which the phrase --one or more members -- has been added is supported, for example, on page 4, lines 1-9, and page 6, lines 9-11.

Support for the amendment to Claim 38 is found, for example, in Claim 5 as filed and on page 3, lines 8-11, page 4, lines 31-32, page 6, lines 30-35, and page 16, line 37.

Response to Rejections and Objections

Claim Rejections - 35 USC § 112, second paragraph

This rejection is avoided by the amendments to the claims.

Claim 18 has been made definite by the amendment to Claim 18, which is now directed to "deconvoluting the pool of cloned test transcription factor polynucleotides -- when said pool comprises more than one transcription factor polynucleotide -- ", and by the amendment to Claim 3, which is now

directed to "-- one or more members -- of the pool of cloned test transcription factor polynucleotides".

Thus, the meaning of the claim is now clear, since one may deconvolute more than one member of the pool when the pool comprises more than one transcription factor polynucleotide.

Claim 33 has been amended to include the limitations of dependent Claim 34, so that the claim incorporates the deconvolution step and thus addresses the Examiner's concern regarding the missing step. This also addresses this part of the rejection of the remaining claims that depend from Claim 33.

The amendments of Claims 39-42 have been made in accordance with the Examiner's suggestion, said suggestion being appreciated by Applicants. Claim 38 has been amended, and structured so that the pathway gene promoter of this claim, for which there is antecedent basis, *--is operably linked--* to a biosynthetic pathway gene.

Accordingly, Applicants respectfully request that the rejection of these claims under 35 USC § 112, second paragraph, be withdrawn.

Claim Rejections - 35 USC § 102(b)

This rejection has in part been avoided by the amendment to the claims, and is in part traversed.

As Claim 3 was indicated to be allowable (except for the objection based on being dependent from rejected Claim 1), former Claims 1 and 3 have been combined into amended Claim 3, and former Claims 3 and 26 have been combined into amended Claim 26. Claims that formerly depended from Claim 1 now depend from Claim 3. As such, the latter dependent claims are not anticipated by Liu et al.

The limitations of Claim 2 have been incorporated into Claim 1, and Claim 2 has been cancelled. Applicants respectfully disagree with the statement of the Examiner that "Liu teaches all of the elements set forth in claims 1,2,4,10,11,13,14 and 26". The Liu reference does not, in fact, teach a method of determining whether a member of a pool of cloned test transcription factor polynucleotides encodes a plant pathway transcription factor, where a member of the cloned test transcription factor polynucleotide pool is ***selected on the basis of structural similarity to a known transcription factor for a pathway gene***. In the Liu reference, DREB1A and DREB 2A were identified using a yeast one-hybrid screening system (see, for example, the section of text beginning on p. 1392, column 2, first three paragraphs of Results, as well as Figure 1. Only after DREB1A and DREB2A were identified was structural analysis conducted, an important distinction from the present invention as represented by presently amended Claim 1 (see, p. 1393, second column, paragraph 2: "Structural Analysis of the DREB1A and DREB2A cDNAs". Liu et al. were attempting to identify transcription factors with EREBP/AP2 binding domains and then confirm function (see, for example, the text beginning on page 1396, column 1, last three lines: "To determine whether the DREB1A and DREB2A proteins are capable of transactivating DRE-dependent transcription in plant cells..."). Thus, DREB1A and DREB2A polynucleotides were not selected on the basis of results

obtained in plant cells, and they were not identified in a screening method on the basis of structural similarity to a known transcription factor for a pathway gene, which are important distinctions from the present invention as represented by presently amended Claim 1.

Accordingly, Applicants respectfully request that the rejection of these claims under 35 USC § 102(b) be withdrawn.

Claim Objections

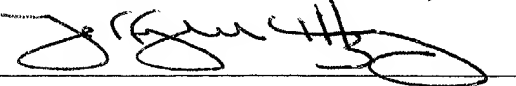
Claim objections have been addressed by amending the present independent and intervening claims to address the Examiner's rejections, and by amending the number of the claims from which the objected-to claims depend.

CONCLUSION

In view of the above amendment and remarks, it is submitted that this application is now ready for allowance. Early notice to that effect is solicited. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned at (510) 259-6138.

Applicants believe that no additional fee is due with this communication. However, if the USPTO determines that a fee is due, the Commissioner is hereby authorized to charge Mendel Biotechnology, Inc. Deposit Account No. **501025**. This form is enclosed in duplicate.

Respectfully submitted,
MENDEL BIOTECHNOLOGY, INC.



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